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09/073,748	05/06/98	WEISSMAN	C 20308.702

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EXAMINER

HO, R

ART UNIT

PAPER NUMBER

2771

DATE MAILED: 06/06/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/073,748

Applicant(s)

Weissman et al.

Examiner

RUAY LIAN HO

Group Art Unit

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☒ Responsive to communication(s) filed on May 6, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-47 is/are pending in the application

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-47 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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Response to Amendment

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-14 & 17-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bapat (USPN 5,295,256) in view of Malloy et al. (USPN 5,905,985).

Regarding claim 1:

The claimed 'a method of creating a system for creating a well-formed database system using a computer' is shown in Bapat col.2, 1.67 to col.3, 1.23,

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the claimed 'the computer accessing a definition of the system, the definition defining a schema for use by the system' is shown in Bapat col.3, l.24-39,

the claimed 'the schema defining a set of tables, a set of columns that correspond to the set of tables, and a set of relationships between the tables of the set of tables' is shown in Bapat col.2, l.67 to col.3, l.39,

the claimed 'the schema further including a definition of a fact table, at least one dimension, and a set of relations between the fact table and the at least one dimension that corresponds to a star schema' is shown in Malloy col.8, l.15-26 & col.9, l.11 to col.10, l.32,

the claimed 'a set of operations for manipulating the data, the set of operations defining programs that operate on the set of tables and the set of table columns; and the computer using the definition to generate the set of tables' is shown in Bapat col.3, l.24 to col.4, l.19.

The Bapat reference does not specifically disclose the 'star schema definition' as claimed in the present invention, however, it is well known technique in the art and disclosed by Malloy et al., and it would have been obvious to one skilled in the art to incorporate the technique into the relational database schema disclosed by Bapat to further expand the usage of it and make the schema more efficient and marketable.

Regarding claim 2:

The claimed 'the set of tables includes a first table and a second table, wherein the first table includes a first column, wherein the second table includes a second column, and wherein the

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first of column and the second column are related by a join and are therefore guaranteed to be from the same domain' is shown in Bapat col.22, 1.35-51.

Regarding claim 3:

The claimed 'the set of tables includes a first table and a second table, wherein the definition defines that the first table relates to the second table by a many to one relationship, and wherein the generating the set of tables includes automatically generating a foreign key column in the first table, wherein the foreign key column is for holding a foreign key to the second table' is shown in Bapat col.4, 1.1-11 & col.31, 1.13-22.

Regarding claim 4:

Claim 4 is rejected for the similar rationale given for claim 3.

Regarding claim 5:

Claim 5 is rejected for the similar rationale given for claim 2.

Regarding claim 6:

The claimed 'the computer using the definition to generate the set of tables also includes the computer performing at least some of the set of operations on at least some of the set of tables' is shown in Bapat col.7, 1.8-38.

Regarding claim 7:

The claimed 'a transaction type column is automatically included in some tables of the set of tables' is shown in Bapat col.10, 1.65 to col.11, 1.32.

Regarding claim 8:

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The claimed 'a date column is automatically included in some tables of the set of tables' is shown in Bapat col.33, 1.24-31.

Regarding claim 9:

The claimed 'a source system key column is automatically included in some tables of the set of tables' is shown in Bapat col.4, 1.1-11.

Regarding claim 10:

The claimed 'extracting data from a source system and for manipulating the data for populating the database, and wherein the set of source system extraction operations correspond to the schema definition' is shown in Bapat col.7, 1.8-19.

Regarding claim 11:

Claim 11 is rejected for the similar rationale given for claim 10.

Regarding claim 12:

Claim 12 is rejected for the similar rationale given for claim 1.

Regarding claim 13:

Claim 13 is rejected for the similar rationale given for claim 1.

Regarding claim 14:

Claim 14 is rejected for the similar rationale given for claim 1.

Regarding claim 17:

The claimed 'the definition includes a user interface definition for querying the database

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and for presenting results, the user interface definition corresponding to the schema definition' is shown in Bapat col.2, 1.6-17 & col.15, 1.65 to col.16, 1.6.

Regarding claim 18:

Claim 18 is rejected for the similar rationale given for claim 17.

Regarding claim 19:

Claim 19 is rejected for the similar rationale given for claim 10 and 17.

Regarding claim 20:

The claimed 'the set of tables includes a set of fact tables and a set of dimension tables' is shown in Malloy col.9, 1.11 to col.10, 1.32.

Regarding claims 21-29:

Claims 21-29 are rejected for the similar rationale given for claims 1-19.

Regarding claims 30-36:

Claims 21-29 are rejected for the similar rationale given for claims 1-19.

Regarding claims 38-42:

Claims 21-29 are rejected for the similar rationale given for claims 1-19.

Regarding claims 43-47:

Claims 43-47 are rejected for the similar rationale given for claims 1-20.

Regarding claim 37:

Claim 37 is rejected for the similar rationale given for claim 20.

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3. Applicant's arguments filed with the 01 September 2000 have been fully considered but they are not persuasive.

Applicants argued that 'Bapat does not disclose a method ... a definition of a fact table, at least one dimension, and a set of relations between the fact table and the at least one dimension that corresponds to a star schema' is not persuasive because it was not included in the claim language. Upon entering the 01 September 2000 amendment, office action has been amended accordingly.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruay L. Ho whose telephone number is (703) 305-3834. The examiner can normally be reached on Monday - Friday from 10 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Yen Vu, can be reached on (703) 305-4393. The fax phone number for this Group is (703) 308-9051 or (703) 308-5403.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800.


RUAY LIAN HO
PRIMARY EXAMINER